ABSTRACT

A system is provided for configuring an audio system for a given space. The system may statistically analyze potential configurations of the audio system to configure the audio system. The potential configurations may include positions of the loudspeakers, numbers of loudspeakers, types of loudspeakers, listening positions, correction factors, or any combination thereof. The statistical analysis may indicate at least one metric of the potential configuration including indicating consistency of predicted transfer functions, flatness of the predicted transfer functions, differences in overall sound pressure level from seat to seat for the predicted transfer functions, efficiency of the predicted transfer functions, or the output of predicted transfer functions. The system also provides a methodology for selecting loudspeaker locations, the number of loudspeakers, the types of loudspeakers, correction factors, listening positions, or a combination of these schemes in an audio system that has a single listening position or multiple listening positions.